09-22-05

1FW 266

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)						Docket No.		
Applicant(s): Yukihiko	o Okumura et al.	0''	FO			156	89.61	
Application No. 09/701,705	Filing Date  December 1, 200	40	2 1 2005 Quan	Examiner uddin Ghulamali	ľ	Customer No. <b>022913</b>	Group Art Unit 2661	
Invention: CHANNEI FADING F	ESTIMATION DI REQUENCY DEC	EVICATA ISION DI	METHEVICE AN	OD, DEMODULATION D METHOD	N D	DEVICE AND M	ETHOD, AND	
I hereby certify that t	he following corres	pondence	<b>e</b> :		-			
- ,		es Postal	Service "E	errespondence)  Express Mail Post Office				
CFR 1.10 in an enve	September 21, (Date)		ssioner for	Patents, P.O. Box 1450	), <i>F</i>	Alexandria, VA	22313-1450 on	
				Adrian (Typed or Printed Name of Pers (Signature of Person Mail  EV 66114 ("Express Mail" Mail	ilin	Mailing Correspond  g Correspondence)  257 US	lence)	

Note: Each paper must have its own certificate of mailing.

Transmittal for Information Disclosure Statement (2 pages; duplicate); Information Disclosure Statement Under 37 C.F.R. § 1.97 (2 pages); Form PTO-1449 Listing of References (2 page); Legible Copy of References; (10 references) Certificate of Express Mail (EV661145257US); Acknowledgment Postcard

TRA	NSMITTA	AL OF INFORMA (Under 37 CFF	1 8 1	cket No. 689.61						
In Re A	In Re Application Of: Yukihiko Okumura et al.  SEP 2 1 2005									
Application No. Filing Date Customer No. Group Art Unit Confirmation										
09/	701,705	December 1, 2000	Unknown	022913	2661	Unknown				
Title:	Title: CHANNEL ESTIMATION DEVICE AND METHOD, DEMODULATION DEVICE AND METHOD, AND									
-			Address to:  Commissioner for Patent P.O. Box 1450  Alexandria, VA 22313-14							
			37 CFR 1.97(b)							
1. 🛚	of a nation three mont application	nal application other ths of the date of ent i; before the mailing of	atement submitted herewith is be than a continued prosecution a stry of the national stage as set of a first Office Action on the me est for continued examination un	application und t forth in 37 CF perits, or before	der 37 CFR 1.53 R 1.491 in an in the mailing of a	3(d); within iternational				
			37 CFR 1.97(c)							
2.  The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:										
☐ the statement specified in 37 CFR 1.97(e);										
OR										
the fee set forth in 37 CFR 1.17(p).										

## TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT Docket No. (Under 37 CFR 1.97(b) or 1.97(c)) 15689.61 In Re Application of: Yukihiko Okumura et al. Application No. Filing Date Customer No. Group Art Unit Confirmation No. Examiner 09/701,705 December 1, 2000 Unknown 022913 2661 Unknown Title: CHANNEL ESTIMATION DEVICE AND METHOD, DEMODULATION DEVICE AND METHOD, AND Payment of Fee (Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p)) is attached. □ A check in the amount of 23-3178 ☑ The Director is hereby authorized to charge and credit Deposit Account No. as described below. Charge the amount of Credit any overpayment. Charge any additional fee required. Payment by credit card. Form PTO-2038 is attached. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. Certificate of Transmission by Facsimile\* Certificate of Mailing by First Class Mail I hereby certify that this correspondence is being deposited I certify that this document and authorization to charge deposit with the United States Postal Service with sufficient postage account is being facsimile transmitted to the United States as first class mail in an envelope addressed to Patent and Trademark Office (Fa "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on (Date) (Date) Signature Signature of Person Mailing Correspondence Typed or Printed Name of Person Signing Certificate Typed or Printed Name of Person Mailing Certificate \*This certificate may only be used if paying by deposit account. Dated: September 21, 2005 Adrian J. Lee CC:

RRESS MAIL NO. EV 525475142 US

PATENT APPLICATION

Docket No: 15689.61

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of		)
	Yukihiko OKUMURA et al.	)
Serial No.:	09/701,705	) Art Unit
Filing Date:	December 1, 2000	) 2661
For:	CHANNEL ESTIMATION DEVICE AND METHOD, DEMODULATION DEVICE AND METHOD, AND FADING FREQUENCY DECISION DEVICE AND METHOD	) ) ) )
Customer No.:	022913	) ) . ·

## <u>UNDER 37 C.F.R. § 1.97</u>

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Please find, pursuant to 37 C.F.R. § 1.98(a)(1), the enclosed Form PTO-1449 which contains a list of all patents, publications, or other items that have come to the attention of one or more of the individuals designated in 37 C.F.R. § 1.56(c). While no representation is made that any of these references may be "prior art" within the meaning of that term under 35 U.S.C. §§ 102 or 103, the enclosed list of references is disclosed so as to fully comply with the duty of disclosure set forth in 37 C.F.R. § 1.56.

Moreover, while no representation is made that a specific search of office files or patent office records has been conducted or that no better art exists, the undersigned attorney of record believes that the enclosed art is the closest to the claimed invention (taken in its entirety) of which

the undersigned is presently aware, and no art which is closer to the claimed invention (taken in its

entirety) has been knowingly withheld.

In accordance with 37 C.F.R. §§ 1.97 and 1.98, a copy of each of the listed references or

relevant portion thereof is also enclosed.

In accordance with 37 C.F.R. § 1.98(a)(3), the following concise explanation of the

relevance of each listed reference that is not in the English language and unaccompanied by a

translation into English is provided. The concise explanation for Japanese Publication No.: 2000-

049662 is provided in the English abstract of that publication. The concise explanation for

Japanese Publication No.: 10-190625 is provided in the English abstract of that publication. The

concise explanation for Japanese Publication No.: 08-265184 is provided in the English abstract of

that publication. The concise explanation for Japanese Publication No.: 07-162361 is provided in

the English abstract of that publication. The concise explanation for Japanese Publication No.: 07-

162360 is provided in the English abstract of that publication. The concise explanation for

Japanese Publication No.: 11-068698 is provided in the English abstract of that publication.

DATED September 21, 2005.

Respectfully submitted,

Adrian J. Lee

Attorney for Applicant

Registration No. 42,785

Customer No. 022913

AJL: ds DS0000004072V001

2

INFORMATION DISCLOSURE CITATION				Docket Number (Optional)	Application Number 09/701,705						
	INFO	RMA	TION DISCLOSURE Use several sheets if necessary	CITATION		Applicant(s) Yukihiko Okumur	a et al.				
/	۱۱6⁄	JE"	<u> </u>	,		Filing Date		Group Art Unit			
	128					December 1	1, 2000	2	2661		
	SEP 2	1 700	4 <b>~</b> )	U.S	. PATENT	DOCUMENTS					
*EXAMINATION INITIAL	REF		DOUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS		FILING DATE  IF APPROPRIATE	
	TAA	DEW									
			<del></del>					<del></del>			
		-							<u> </u>		
				U.S. PATENT	CAPPLICA	ATION PUBLICATIONS	s				
*EXAMINER	Γ	Ι		T			<u> </u>	<del></del>	T		
INITIAL	REF		DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING DATE  IF APPROPRIATE		
				<del> </del>							
	;										
							ŧ				
							į		<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>		
							:				
				FORE	IGN PATE	NT DOCUMENTS	;				
	REF		DOCUMENT NUMBER	DATE	Japan Japan Japan		; CLASS	SUBCLASS	Tran YES	slation NO	
	ı	11-(	068698	3/9/1999			H04J13	00			
	2	07-1	162360	6/23/1995			H04B7	26	1		
	3	07-1	162361	6/23/1995			H04B7	26	. J		
	4	08-2	265184	10/11/1996	Japan		H04B1	10	1		
	5	10-190625 7/21/1998 Japan		Japan		04	1				
	_		<u> </u>	OTHER I	OCUMEN	TS (Including A	uthor, Title, Date,	Pertinent Pages, E	tc.)		
	<u> </u>	1	EVALUATION OF TI	HE RADIO CHAI	NNEL ES	TIMATION BASED (	ON THE LEAST	SQUARES ME	THOD		
		6	Yashuharu Amezawa, S	Shinishi Sato, and	Takao Su	zuki				- 1	
		_	EXPERIMENTS ON I	PILOT SYMBOL	-ASSISTI	ED COHERENT RAK	E RECEIVER I	OR W-CDMA	MOBILE	RADIO	
		7	H. Andoh, K. Higuchi, page 59-65(1998-04)	K. Okawa, M. Sa	wahashi, a	and F. Adachi				8 8 1	
7			•								
EVANDE			<del></del>			DATE CONGRESS					
EXAMINER				DATE CONSIDERED							
			ation considered, whether			Ince with MPEP Section 6	609; Draw line thre	ough citation if no	t in conform	nance and	
not conside	rea. H	cruae (	opy of this form with next	communication to	appneant.						

Form PTO-A820 (also form PTO-1449)

INFORMATION DISCLOSURE CITATION  O Popo several sheets if necessary)				ATTY DOCKET NO.	APPLICATION NO. 09/701,705						
				15689.6							
					APPLICANT(S)						
	10	TP	several sheets if nece	ssary)		Yukihiko Okumura	a et al.	I an a vin v an i vi			
	48					FILING DATE		GROUP ART UNIT			
						December 1	, 2000	VE 1 4 5 1 1 1 1	2661		
	SE	P 2 1	2005	U	I.S. PATENT	DOCUMENTS					
*EXAMINER INITIAL	R. T.	<b>X</b>	DOMMENT NUMBER	DATE		NAME CL		CLASS SUBCLASS		FILING DATE  IF APPROPRIATE	
		TADE	Million								
							:				
				U.S. PATE	NT APPLIC	ATION PUBLICATIONS					
*EXAMINER INITIAL			DOCUMENT NUMBER	DATE		NAME		CLASS SUBCLASS		FILING DATE IF APPROPRIATE	
							:				
							1				
							1				
				FOF	REIGN PATE	NT DOCUMENTS	i	· · · · · · · · · · · · · · · · · · ·			
		DOCUMENT NUMBER DATE				COUNTRY	SUBCLASS TRAN		SLATION		
	8	200	00-049662	2/18/2000	Japan		H04B1	707	1		
							-				
		Ī									
			OTHER DOCUM	(	ing Author	, Title, Date, Pertine	ent Pages, Etc	<del></del> c.)	4		
		9	Official Notice of Reje Patent Application No Case No.: DCMH1502	ection .: 2003-277907 69	,						
		10	Official Notice of Reje Patent Application No Case No.: DCMH1502	ection .: 2003-277908 70							
EXAMINE	R		<del>_</del>			DATE CONSIDERED					
*EXAMINI	ER: Ini	tial if re	eference considered, whe	ther or not citation	is in conform	nance with MPEP 600- D	Iraw line through	citation if not in		e and not	
			ppy of this form with next of					. J.J. J. Hot III	- Indinana	o and not	

Form PTO-A820 (also form PTO-1449) P09C/REV04